Plotter Drivers as an Exercise in Forth Wordset Design

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ABSTRACT

Three levels of driver design are discussed for a typical X-Y plotter. A minimum driver merely permits FORTH to mimic the plotter's internal BASIC command set. A more elegant one transforms the same commands into a more FORTH-like and more English-like wordset. Finally, the command set is modified and vectored into the existing MMSFORTH TGRAPH (Turtle Graphics) utility. This transforms the plotter into an optional video screen to which one can output TGRAPH graphics routines without any modification.

Demonstrations will be given using the inexpensive Radio Shack FP-215 Flatbed Plotter. Source code for a simple FORTH implementation is included, and can be adapted to many similar plotters.

Editors and Editing Technique: A Review of Fancy and Practical Features in the Evolution of the MMSFORTH Screen Editor

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ABSTRACT

The editor is the ultimate utility for the FORTH Programmer, as it is the one with which he or she works most completely. And since it is apt to be written in FORTH, it is easily adapted to new ideas. Thus the important and malleable FORTH editor receives great attention and is a logical focus for objective and subjective design considerations.

Since 1978, MMSFORTH Editor has evolved through many standard and special versions. Some of the more interesting features and user techniques, from our earliest line editor through the sophisticated screen editor in our new MMSFORTH V2.4, are discussed.

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